spent in the Oranges would be obviously wasted.

As applied to the usual inland species the argument made is fully borne out by my field experience. As to the salt marsh breeders it is utterly inapplicable—witness the fact that the work done on the Newark meadows resulted in a marked decrease in the mosquito troubles at Paterson many miles to the north.

John B. Smith.

New Brunswick, N. J.,
December 15, 1905.

YELLOW FEVER AND THE PANAMA CANAL.

To the Editor of Science: The continuous discussion of Panama Canal affairs suggests to me to call attention to the possibility that the cutting of the canal may lead to trouble from yellow fever in two of our Pacific island colonies. In the summer of 1902, spent in the Hawaiian and Samoan islands as agent of the U. S. Bureau of Fisheries, my attention was forcibly called to the unusual proportions of the mosquito plague in both these island groups. If it were not for the dragonflies which wage effective war against the 'day mosquitoes,' and for the bed canopies of netting which protect the sleeper from 'night mosquitoes,' life would hardly be tolerable in Honolulu. In Tutuila (our principal Samoan island) mosquitoes are the most obvious features of the above-water fauna aside from the brown natives themselves. Now both in Hawaii and Samoa one of the most abundant of the infesting mosquito species is *Stegomyia fasciata,* which is none other than the yellow-fever mosquito, that is, the particular mosquito species which harbors and disseminates, in yellow fever regions, the plasmodium or bacterium which is the immediate cause of the disease.

So far no cases of yellow fever have occurred in Hawaii or Samoa, but this is obviously not because of the absence of the yellow fever host, but, presumably, of the yellow fever specific causal agent, the pathogenic 'germ.' It is to be presumed that ships have not yet carried yellow-fever-germ-infested specimens of *Stegomyia* from the West Indies to Hawaii or Samoa. Going round the Horn is probably an effective check to the spread of yellow fever from the West Indies to our Pacific Islands by reason both of the time required and the low temperatures met. Besides there is little traffic now between the two regions. But with the cutting of the canal, making possible a direct short-time passage of ships from the Gulf of Mexico to Hawaii, or to Samoa, all of the voyage being within tropical or subtropical latitudes—the Hawaiian islands are in 20° north latitude, the Samoan islands in 14° south latitude—will there not be a real danger of planting the dread agent of yellow fever in our Pacific colonies in which already the necessary insect host exists in enormous numbers? There may be obvious reasons why this migration can not take place, but they are not apparent to me now. It is, at least, a contingency to be had in mind by those charged with the responsibility of public health affairs in Hawaii and Samoa.

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REPORT OF THE TENTH GEOLOGICAL EXPEDITION OF HON. CHARLES H. MORRILL, SEASON OF 1905.

The season of 1905 marked a renewal of paleontological activity in the University of Nebraska, since it so happened that for the first time in several years funds became available again for the prosecution of such work.

By virtue of the liberal support and patronage of Hon. Charles H. Morrill, of Lincoln, annual geological expeditions, essentially paleontological in character, had been maintained in connection with the state university since 1892. In 1901, though his interest in the work as well as his good will continued, his patronage ceased. This was wholly due to the overcrowded condition of the state museum, coupled with unusual fire risks, which plainly endangered public and private collections. In the meantime the work of making general collections has been pushed by the state survey, but the special work conducted by the annual Morrill geological expeditions was necessarily of a desultory order, the expenses being met by the sale of duplicate specimens.